

**AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

**LISTING OF CLAIMS:**

1. (original): A catalyst for hydrotreating a hydrocarbon oil, which comprises an inorganic oxide support containing a phosphorus oxide in an amount of 15% by weight or less on the basis of the support and having provided thereon:

at least one selected from metals in the Group 6 of the periodic table in an amount of from 10 to 40% by weight,

at least one selected from metals in the Group 8 of the periodic table in an amount of from 1 to 15% by weight, and

carbon in an amount of from 2 to 14% by weight,

in terms of respective oxides on the basis of the catalyst,

wherein the catalyst has a specific surface area of from 100 to 400 m<sup>2</sup>/g, a pore volume of from 0.2 to 0.6 ml/g, and a mean pore diameter of from 50 to 200Å.

2. (currently amended): The catalyst for ~~a~~-hydrotreating a hydrocarbon oil according to claim 1, wherein a ratio by weight between the metal in the Group 8 of the periodic table and the metal in the Group 6 of the periodic table as a value of [metal in the Group 8]/[(metal in the Group 8) + (metal in the Group 6)] is from 0.1 to 0.25 in terms of respective oxides.

3. (canceled).

4. (currently amended): A process for producing the catalyst for hydrotreating a hydrocarbon oil according to any one of claims ~~1 to 3~~ 1, 2, and 8, which comprises supporting a metal in the Group 6 of the periodic table so as to be at from 10 to 40% by weight, a metal in the Group 8 of the periodic table so as to be at from 1 to 15% by weight in terms of respective oxides, and carbon so as to be at from 2 to 14% by weight on the basis of the catalyst, using a solution containing a compound containing at least one selected from metals in the Group 8 of the periodic table, a compound containing at least one selected from metals in the Group 6 of the periodic table, and an organic acid, on an inorganic oxide support containing a phosphorus oxide at 15% by weight or less on the basis of the support which has a specific surface area of from 230 to 500 m<sup>2</sup>/g, a pore volume of from 0.5 to 1 ml/g, and an mean pore diameter of from 40 to 180Å, followed by drying at 200°C or lower.

5. (currently amended): The process for producing the catalyst for hydrotreating a hydrocarbon oil according to claim 4, wherein the ~~above~~-inorganic oxide support containing a phosphorus oxide is prepared by a kneading method of kneading a starting material of the inorganic oxide support and a starting material of the phosphorus oxide.

6. (currently amended): The process for producing the catalyst for hydrotreating a hydrocarbon oil according to claim ~~4 or 5~~, wherein the ~~above~~-inorganic oxide support containing a phosphorus oxide is prepared by calcining at from 400°C to 700°C for from 0.5 to 10 hours.

7. (currently amended): A method for hydrotreating a hydrocarbon oil, wherein a catalytic reaction is carried out at a hydrogen partial pressure of from 0.7 to 8 MPa, a

temperature of from 220 to 420°C, a liquid hourly space velocity of from 0.3 to 10 hr<sup>-1</sup> in the presence of the catalyst for hydrotreating a hydrocarbon oil according to any one of claims ~~1 to 3~~ 1, 2 and 8.

8. (new): The catalyst for hydrotreating a hydrocarbon oil according to claim 1, wherein the element in the Group 6 of the periodic table is molybdenum,  
the carbon is derived from an organic acid,  
the inorganic oxide support contains a phosphorus oxide in an amount of 0.1 to 13% by weight on the basis of the support,  
the inorganic oxide support has further provided thereon a phosphorus oxide in which the total amount of the phosphorus oxide is 15% by weight or less and,  
the ratio by weight [P<sub>2</sub>O<sub>5</sub>/MoO<sub>3</sub>] of the total weight of the phosphorus oxide to molybdenum oxide is 0.05 to 1.0.

9. (new): The catalyst for hydrotreating a hydrocarbon oil according to claim 8, wherein the inorganic oxide support contains a phosphorus oxide in an amount of 1 to 13% by weight on the basis of the support.

10. (new): The catalyst for hydrotreating a hydrocarbon oil according to claim 9, wherein the inorganic oxide support contains a phosphorus oxide in an amount of 1 to 10% by weight on the basis of the support.

11. (new): The catalyst for hydrotreating a hydrocarbon oil according to claim 8, wherein a ratio by weight between the metal in the Group 8 of the periodic table and molybdenum as a value of  $[\text{metal in the Group 8}]/[(\text{metal in the Group 8}) + (\text{molybdenum})]$  is from 0.1 to 0.25 in terms of respective oxides.

12. (new): The process for producing the catalyst for hydrotreating a hydrocarbon oil according to claim 4, wherein the element in the Group 6 of the period table is molybdenum, the carbon is derived from an organic acid, the inorganic oxide support contains a phosphorus oxide in an amount of 0.1 to 13% by weight on the basis of the support, the inorganic oxide support has further provided thereon a phosphorus oxide in which the total amount of the phosphorus oxide is 15% by weight or less and, the ratio by weight  $[\text{P}_2\text{O}_5/\text{MoO}_3]$  of the total weight of the phosphorus oxide to molybdenum oxide is 0.05 to 1.0.

13. (new): The process for producing the catalyst for hydrotreating a hydrocarbon oil according to claim 12, wherein the inorganic oxide support contains a phosphorus oxide in an amount of 1 to 13% by weight on the basis of the support.

14. (new): The process for producing the catalyst for hydrotreating a hydrocarbon oil according to claim 13, wherein the inorganic oxide support contains a phosphorus oxide in an amount of 1 to 10% by weight on the basis of the support.

15. (new): The process for producing the catalyst for hydrotreating a hydrocarbon oil according to claim 12, wherein the inorganic oxide support containing a phosphorus oxide is prepared by a kneading method of kneading a starting material of the inorganic oxide support and a starting material of the phosphorus oxide.

16. (new): The process for producing the catalyst for hydrotreating a hydrocarbon oil according to claim 12, wherein the inorganic oxide support containing a phosphorus oxide is prepared by calcining at from 400°C to 700°C for from 0.5 to 10 hours.